

What is Claimed:

1           1. An administration server for determining whether to provide a  
2 software program update to a processor group, the processor group including a plurality  
3 of client processors, said administration server comprising:

4                 configuration receiving means for receiving and storing a set of system  
5 configuration attributes from the processor group, the system configuration attributes  
6 indicating whether a copy of a client software program may be applicable to the  
7 processor group;

8                 configuration transmitting means for transmitting the set of system  
9 configuration attributes to a selection server;

10                 update receiving means for receiving an update recognizer program from  
11 the selection server, the update recognizer program being associated with the client  
12 software program; and

13                 update recognizer transmitting means for transmitting the update  
14 recognizer program to the processor group, wherein the processor group executes the  
15 update recognizer program to issue a notification indicating whether a software program  
16 update is applicable to the copy of the client software program in the processor group.

1           2. The administration server according to claim 1, further comprising:

2                 notification receiving means for receiving the notification from the  
3 processor group; and

4                 update transmitting means responsive to the notification for transmitting  
5 the software program update to the processor group if the software program update is  
6 applicable to the copy of the client software program in the processor group.

1                   3.     The administration server according to claim 1, further comprising  
2     system recognizer transmitting means for transmitting a system recognizer program to the  
3     processor group, wherein the processor group executes the system recognizer program to  
4     determine the system configuration attributes.

1                   4.     An administration server for determining whether to provide a  
2     software program update to a processor group, the processor group including a plurality  
3     of client processors, each client processor of the plurality of client processors having a  
4     copy of at least one of a plurality of client software programs, said administration server  
5     comprising:

6                   configuration receiving means for receiving and storing a respective set of  
7     system configuration attributes from each one of the plurality of client processors of the  
8     processor group, the system configuration attributes indicating whether a copy of any of  
9     the client software programs may be applicable to the processor group;

10                  10                  configuration transmitting means for transmitting each set of system  
11                  11                  configuration attributes to a selection server;

12                  12                  update receiving means for receiving a respective update recognizer  
13                  13                  program from the selection server corresponding to each respective one of the plurality of  
14                  14                  client software programs; and

15 update recognizer transmitting means for transmitting to each client  
16 processor of the processor group the update recognizer program corresponding to the at  
17 least one client software program in that processor, wherein each client processor of the  
18 processor group executes at least one of the update recognizer programs to issue a  
19 notification indicating whether a corresponding software program update is applicable to  
20 the copy of the at least one client software program in that client processor.

1 5. The administration server according to claim 4, further comprising:

2 notification receiving means for receiving the respective notification from  
3 each client processor of the processor group; and

4 update transmitting means responsive to the notifications for transmitting  
5 the software program update to at least one of the client processors of the processor group  
6 for which the software program update is applicable.

1 6. The administration server according to claim 5, further comprising:

2 selecting means for selecting at least one of the plurality of software  
3 programs and at least one of the plurality of client processors of the processor group, the  
4 update transmitting means being responsive to the selecting means for transmitting a  
5 software program update associated with each selected software program to each selected  
6 client processor.

1 7. The system according to claim 6, wherein the selecting means  
2 utilizes an additional user-defined criterion other than a hardware configuration or  
3 software configuration of the plurality of client processors to perform the selecting.

1 8. The administration server according to claim 4, further comprising  
2 system recognizer transmitting means for transmitting a system recognizer program to  
3 each of the plurality of client processors of the processor group, wherein each client  
4 processor of the processor group executes the system recognizer program to determine  
5 the respective system configuration attributes.

1               9.     In a system having a processor group and first and second server  
2     processors, a method of updating software in the processor group, comprising the steps  
3     of:

4               storing in the first server processor a set of system configuration attributes  
5     from the processor group, the system configuration attributes indicating whether a copy  
6     of a client software program may be applicable to the processor group;

7               transmitting the set of system configuration attributes from the first server  
8     processor to the second server processor;

9               transmitting an update recognizer program from the second server  
10    processor to the first server processor, the update recognizer program being associated  
11    with the client software program;

12              transmitting the update recognizer program from the first server processor  
13    to the processor group; and

14              executing the update recognizer program in the processor group in order to  
15    issue a notification indicating whether a software program update is applicable to the  
16    copy of the client software program in the processor group.

1               10.    The method according to claim 9, further comprising the steps of:

2               transmitting the notification from the processor group to the first server  
3     processor; and

4               transmitting the software program update from the first server to the  
5     processor group if the software program update is applicable to the copy of the client  
6     software program in the processor group.

1               11.    The method according to claim 10, wherein the processor group  
2     includes a plurality of client processors, each adapted to have a copy of at least one of a  
3     plurality of software programs, for which a plurality of software program updates are

4 transmitted from the second server processor to the first server processor, further  
5 comprising the steps of:

6 transmitting notifications from the plurality of client processors to the first  
7 server processor, each notification indicating whether one of the software program  
8 updates is applicable to the corresponding client processor;

9 selecting one of the plurality of software programs and one of the plurality  
10 of clients; and

11 transmitting a software program update associated with the selected  
12 software program from the first server processor to the selected client processor.

12. A computer-readable medium for use in an administration server  
1 processor for determining whether to provide a software program update to a processor  
2 group, the processor group including a plurality of client processors, the computer  
3 readable medium comprising:

5 means for causing the administration server processor to receive and store  
6 a set of system configuration attributes from the processor group, the system  
7 configuration attributes indicating whether a copy of a client software program may be  
8 applicable to the processor group;

9 means for causing the administration server processor to transmit the set  
10 of system configuration attributes to a selection server processor;

11 means for causing the administration server processor to receive an update  
12 recognizer program from the selection server processor, the update recognizer program  
13 being associated with the client software program; and

14 means for causing the administration server processor to transmit the  
15 update recognizer program to the processor group, wherein the processor group executes  
16 the update recognizer program to issue a notification indicating whether a software

17 program update is applicable to the copy of the client software program in the processor  
18 group.

1                   13. The computer-readable medium according to claim 12, further  
2 comprising:

3                   means for causing the administration server processor to receive the  
4 notification from the processor group; and

5                   means for causing the administration server processor to respond to the  
6 notification by transmitting the software program update to the processor group if the  
7 software program update is applicable to the copy of the client software program in the  
8 processor group.

1                   14. The computer-readable medium according to claim 12, further  
2 comprising means for causing the administration server processor to transmit a system  
3 recognizer program to the processor group, wherein the processor group executes the  
4 system recognizer program to determine the system configuration attributes.

1                   15. A three-tiered configuration management system comprising:

2                   a third tier comprising a selection server;

3                   a first tier comprising a processor group having a plurality of client  
4 processors; and

5                   a second tier comprising an administration server for determining whether  
6 to provide a software program update to said processor group, said administration server  
7 comprising:

8                   configuration receiving means for receiving and storing a set of system  
9 configuration attributes from the processor group, the system configuration attributes  
10 indicating whether a copy of a client software program may be applicable to the  
11 processor group;

12                   configuration transmitting means for transmitting the set of system  
13                   configuration attributes to a selection server;

14                   update receiving means for receiving an update recognizer program from  
15                   the selection server, the update recognizer program being associated with the client  
16                   software program; and

17                   update recognizer transmitting means for transmitting the update  
18                   recognizer program to the processor group, wherein the processor group executes the  
19                   update recognizer program to issue a notification indicating whether a software program  
20                   update is applicable to the copy of the client software program in the processor group.